Pollution Prevention for Vehicle Maintenance and Repair Shops

Procedural or Policy Change

1. Prepare and follow a waste management reduction policy for your facility.
2. Include pollution prevention in employee training and job descriptions.
3. Include pollution prevention in all standard operating procedures.
4. Follow hazardous materials management procedures to minimize excess inventory.
5. Create incentives for waste reduction/elimination.
6. Review procedures regularly for opportunities to reduce or eliminate materials and wastes.
7. When starting a new job, consider its waste streams and strive to reduce or eliminate them as a part of the job's standard operating procedures.

Inventory Controls

1. Before purchasing a new chemical or chemical product, try to obtain chemicals needed from another shop or activity on Post (FREEBIES program through HITS).
2. Purchase hazardous materials in the smallest quantities needed. Obtain hazardous materials only if you will use them within 6 months or before they will expire.
3. Centralize purchasing of hazardous materials through one person in the shop.
4. Submit hazardous materials data updates to the HAZMART weekly.
5. Promptly flag all excess usable chemical products to your activity environmental coordinator or the Installation HAZMART for re-issue.
6. Follow first-in, first-out procedures.

Process or Equipment Change

1. Consider the quantity and type of wastes produced when purchasing new equipment. Purchase equipment that is most efficient and produces less waste.
2. Consider using aqueous or citrus cleaners or ozone treatment for parts cleaning.
3. Use digital photography whenever possible. If traditional, wet-processing photography and x-ray remain the only viable options, ensure that all spent fixer is processed for silver recovery.
4. Use HVLP paint guns, Laser Touch and MiniMax Cleaner for paint equipment.
5. Use digitized or automated equipment whenever possible to eliminate wastes from inaccuracy and error.
6. Perform work in batches to minimize hazardous waste resulting from cleaning.

Material Substitution

1. Eliminate the use of solvent cleaning all together where possible. Use aqueous and citrus cleaners as much as possible.
2. Review the use of highly toxic, reactive, carcinogenic or mutagenic materials to determine if safer alternatives are feasible.
3. Avoid the use of hazardous materials. Try to find non-flammable, biodegradable substitutes. If hazardous solvents must be used, consider redistillation to reduce waste.
4. Avoid the use of oxidizers.
5. Use high solids, low-VOC paints that do not contain lead, chromium, cadmium or barium.
6. Use pump sprays instead of aerosols.
7. If you must use an aerosol spray paint, use those that are no more hazardous than as Krylon Kids Tuff and Home Décor latex spray paints.

Material Reuse

1. Examine your waste/excess chemicals to determine if there are other users in your shop, neighboring shops, departments or other APG activities that might be able to use them.
2. Purchase compressed gas cylinders only from manufacturers who will accept the empty cylinders back.
3. When solvents are required for cleaning purposes, use spent solvent for initial cleaning and fresh solvent for final cleaning.
4. Evaluate other wastes for reclamation in shops. Discuss this with your AEC during your Satellite Accumulation Site inspections.
5. When replacing vehicle fluids, use re-refined oil and recycled antifreeze.
6. Replace spent tires with re-treaded tires.
7. Burn waste oil in a used oil heater in the winter.
8. Use small shop towels and reuse them until spent for repetitive tasks prior to recycling.
9. Recycle used batteries, tires, oil, and antifreeze through DRMO or a contractor.

Process Efficiency

1. When cleaning materials by dipping, use the smallest possible container and process multiple items at once.
2. Perform preventative maintenance. Fix leaks, drips, and poorly working equipment regularly to maximize efficiency.